Mid-Valley
STEM-CTE HUB

Tiny Tornado

from "Mason Jar Science" by Jonathan Adolf

Companion Worksheet

Materials:

- 1 Quart-size mason jar, with lid
- Water
- Food coloring
- Dishwashing soap
- Glitter (optional)
- Vinegar (if needed)

Instructions:

1. Fill jar with water, leave 1 inch of room of space at the top.
2. Add 1 teaspoon of dishsoap, a couple drops of food coloring, and glitter (optional).
3. Screw on lid, check for leaks and shake up the jar to mix contents together.
4. Get the water spinning by moving the jar in a circular motion for 5 to 10 seconds. Stop swirling, and hold jar up to the light to observe the vortex the spinning as created.

Questions

1. Draw what is happening inside the jar.

Hint: If you're having trouble forming a vortex in the jar, scoop out some bubbles and add a teaspoon of vinegar.

2. What factors do you think are helping this tornado form?

3. Describe the movement of the tornado.